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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------------------------------|----------------------|---------------------|------------------|
| 10/073,098 | 02/12/2002 | Patrick H. Stanley | 56291.000018 | 3691 |
| THOMASKA | 7590 01/24/2008 VDEN HORSTEMEYER | EXAMINER | | |
| THOMAS KAYDEN HORSTEMEYER & RISLEY LLP 100 GALLERIA PARKWAY SUITE 1750 | | | DUONG, DUC T | |
| ATLANTA, GA 30339 | | | ART UNIT | PAPER NUMBER |
| • | | | 2619 | |
| | | | | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 01/24/2008 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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| | Application No. | Applicant(s) | | | | |
| . | 10/073,098 | STANLEY ET AL | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Duc T. Duong | 2619 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMU 136(a). In no event, however, ma will apply and will expire SIX (6) No. a, cause the application to becom | NICATION. y a reply be timely filed MONTHS from the mailing date of this communication. Be ABANDONED (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on <u>06 N</u> | lovember 2007. | • | | | | |
| | | | | | | |
| | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | · - | | | | | |
| | Jare pending in the ann | lication | | | | |
| 4)⊠ Claim(s) <u>2-11,13-38,40-51,54-59 and 61-66</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) <u>2-11,13-38,40-45 and 61-66</u> is/are al | | | | | | |
| 6)⊠ Claim(s) <u>46,47,51 and 54-56</u> is/are rejected. | | | | | | |
| 7)⊠ Claim(s) <u>48-50 and 57-59</u> is/are rejected. | | | | | | |
| <u> </u> | 8) Claim(s) 40-30 and 37-39 israte objected to. 8) Claim(s) are subject to restriction and/or election requirement. | | | | | |
| | · | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | |
| | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| | xaminer. Note the attac | ned Office Action or form P10-152. | | | | |
| Priority under 35 U.S.C. § 119 | - | | | | | |
| 12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) All b) Some * c) None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
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| Attachment(s) | | • | | | | |
| 1) Notice of References Cited (PTO-892) | | w Summary (PTO-413) | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | | No(s)/Mail Date of Informal Patent Application (PTO-152) | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date | 6) Other: | | | | | |
| U.S. Patent and Trademark Office PTOL-326 (Rev. 7-05) Office A | action Summary | Part of Paper No./Mail Date | | | | |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 46-51 and 54-59 have been considered but are most in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 46, 51, and 54-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Betts (US Patent 6,014,371) in view of Linz (US Patent 6,611,564 B1).

Regarding to claims 46 and 51, Betts discloses a method for communicating information packets from a Central Office CO modem, the method (fig. 1 col. 4 lines 62-67) comprising the steps of observing a training process for a plurality of CPE modems (fig. 3 col. 5 lines 4-5); assigning a CPE selector identifier (address) to each CPE modem (fig. 3 col. 5 lines 5-6); generating a polling sequence addressed to each CPE modem (fig. 3 col. 5 lines 14-15); and forwarding information packets in a burst to the plurality of CPE modems, via the CPE selector identifier for each CPE modem (fig. 3 col. 15 lines 15-21).

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Betts fails to teach the CPE selector identifier is assigned by the CO modem during the training process.

However, Linz discloses a method and apparatus for communication between a host modem 805 and a plurality peer modems 810, wherein a symbol (identifier) is allocated to each peer modem during the training process (fig. 8-9 col. 8 lines 36-58).

Thus, it would have been obvious to a person of ordinary skill in the art to employ a training process as taught by Linz into Betts's system to provide the host unit with an access control that will determine the number of peers it can support based on the network capacity.

Regarding to claims 54 and 55, Betts discloses all the limitations with respect to claim 51, except for the plurality of CPE modems are trained and responded to a substantially similar set of speeds. However, Linz discloses a method of communication between a host modem and a plurality of peer modems, wherein the plurality of peer modems are trained and responded to a similar set of speeds (fig. 9 col. 8 lines 59-62). Thus, it would have been obvious to a person of ordinary skill in the art to employ such training and responding speeds for the plurality of modems as taught by Linz into Betts's system to provide users with an equal share of network bandwidth.

Regarding to claim 57, Betts and Linz discloses all the limitations with respect to claim 51, except for processing the frame header to determine processing data.

However, to arrange for such header processing for a frame would have been obvious

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to a person of ordinary skill in the art since processing is well known in the art that's used for frame control.

4. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Betts and Linz in view of Locklear, Jr. et al (US Patent 5,999,565).

Regarding to claim 47, Betts and Linz disclose all the limitations with respect to claim 46, except for maintaining a table of trained speed for the plurality of modems. However, Locklear discloses a communication system between a server and a plurality of modems, wherein a table of trained speeds for the plurality of modems is maintain (fig. 4 col. 8 lines 14-67). Thus, it would have been obvious to a person of ordinary skill in the art to employ such table as taught by Locklear into Betts and Linz's system to determine the optimal mode of operation of the modems for future transmissions.

Allowable Subject Matter

- 5. Claims 48-50 and 57-59 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 6. Claims 2-11, 13-38, 40-45 and 61-66 allowed.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc T. Duong whose telephone number is 571-272-3122. The examiner can normally be reached on M-F (9:00 AM-6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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